

# Makers' Mark

A Survey of Makerspace Initiatives at IU

# Intro to 3D Modeling with Tinkercad

Tomorrow! Thursday, April 20

2:00-3:30pm

Wells Library W144

Register at **[iub.libcal.com](http://iub.libcal.com)**



Make:

# Make It Glow

LED PROJECTS FOR THE WHOLE FAMILY

EMILY COKER  
KELLI TOWNLEY



## Start by Making Glowies

### SKILL LEVEL 1

Tape an LED to a battery and you've made a "Glowie." This simple circuit is the secret ingredient for all the activities in this chapter. In fact, it's the basis for lots of different ways to make your world glow.

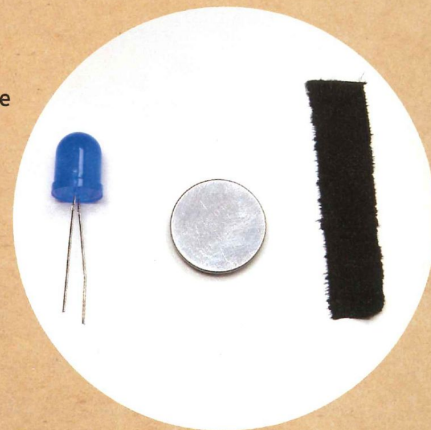
### Get your tools & materials...

#### TOOLS

- » Scissors

#### MATERIALS

- » One LED (any type)
- » One 3V coin-cell battery (CR2032)
- » Tape (any type)



# Characteristics of a makerspace

Hands-on learning (creating over consuming)

About communities of people (not stuff)

Failure is inevitable (and encouraged)



# What is a makerspace?

“A makerspace is a place where people can gather to create, invent, tinker, explore, and discover using a variety of tools and materials.”

*-Diana Rendina, Renovated Learning*



# MAD LAB 1

Located in Fine Arts 141

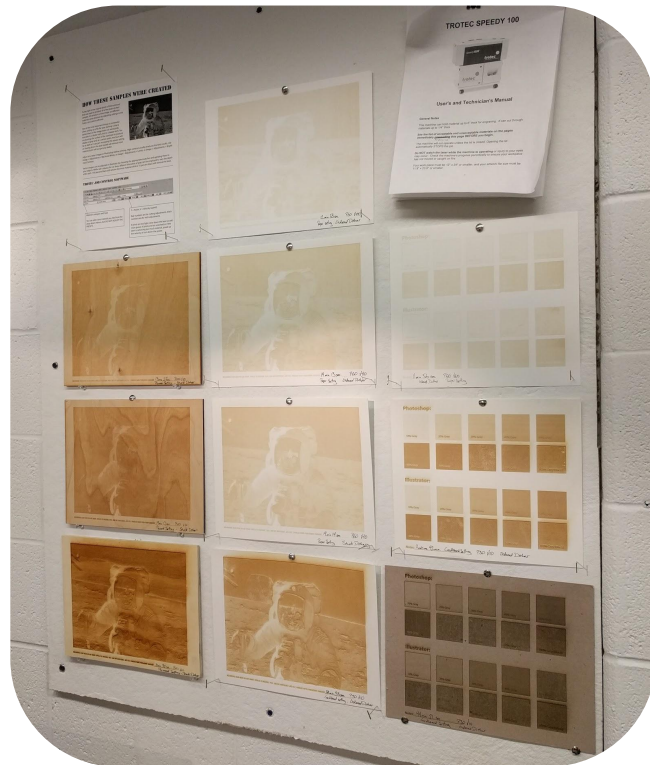
Affiliated with the  
School of Art + Design

Opened in 2016

Digital fabrication  
output labs







## Laser Engraving & Cutting



**Vinyl Cutter**





**FDM 3D Printers**





**SLA 3D Printers**



**Binder Jet 3D Printer**



# Funding

Originally funded by the Chair of the Studio Art Department, funds from the Dean of the College of Arts and Sciences, the Dean of the School of Art + Design, and the Department of Chemistry

Services are billed to bursar, research, or departmental accounts

Costs roughly  $\frac{1}{4}$  of equivalent commercial services



# People

*Ryan Mandell, Digital Fabrication Labs  
Coordinator*

Staffed by students that specialize in different  
areas

Open 9a-4pm Monday through Thursday and  
11a-5p Friday through Sunday





**Tour the MAD LAB**

# MILL

Make Innovate Learn Lab

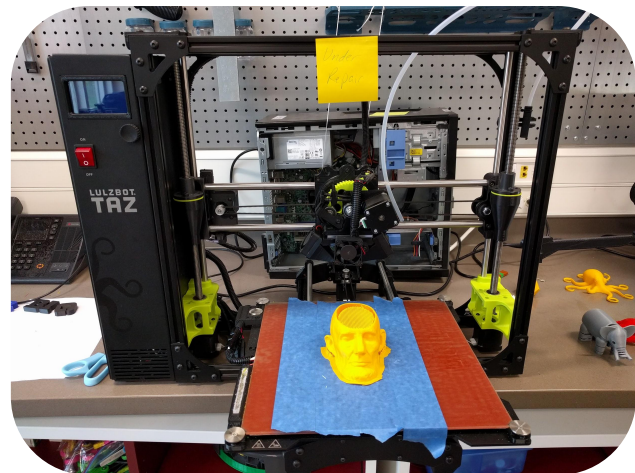
School of Education

Opened Fall 2015

*Adam Maltese, Director*







# Access

Accessible during open  
lab hours

Key card access  
available for students  
and faculty with  
training





# The Make Innovate and Learn Lab

# Tour the MILL

# Creativity Labs

Affiliated with the Center for  
Research on Learning and  
Technology

Grant funded project team that  
aims to bring STEM and creativity  
into learning

Offices and workspaces in  
Eigenmann Hall





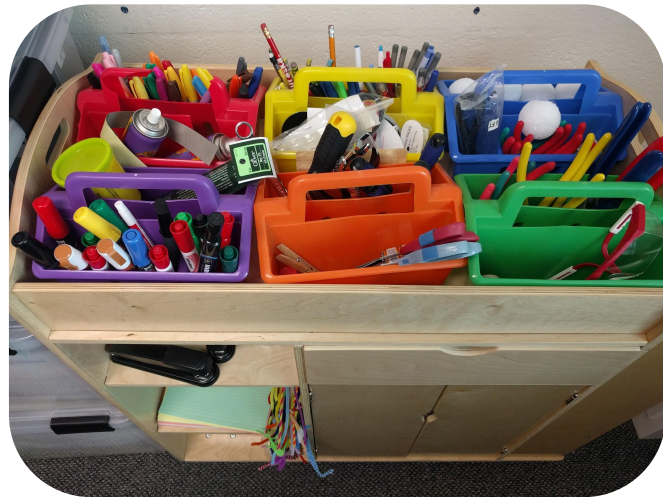
# Staff & Partnerships

3 staff, 5 full-time grad students, and 5 hourly students

So many partnerships!!!

THE CREATIVITY LABS HAS PARTNERED WITH THE FOLLOWING GROUPS ON RECENT AND CURRENT PROJECTS:



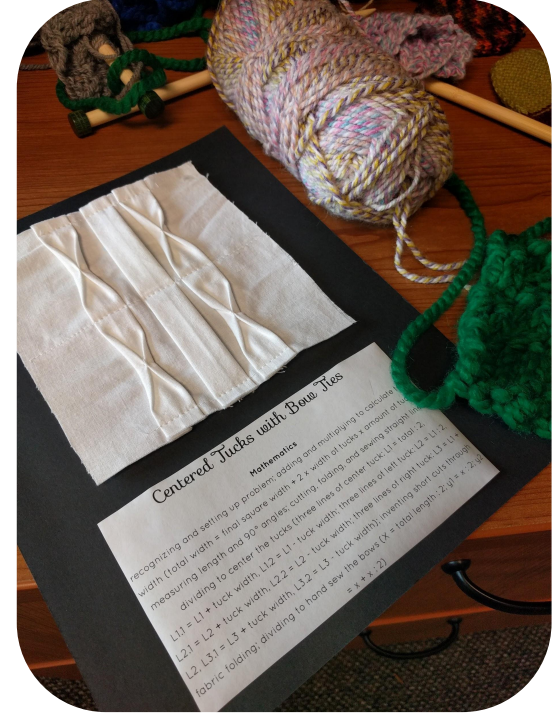


# Projects

## Re-Crafting Math

Making connections  
between math and  
traditional women's craft

Funded by the National  
Science Foundation





# Projects

BioSim

Students take the perspective of an ant or honeybee

Computer enhanced e-puppets



*Images from IU Newsroom*





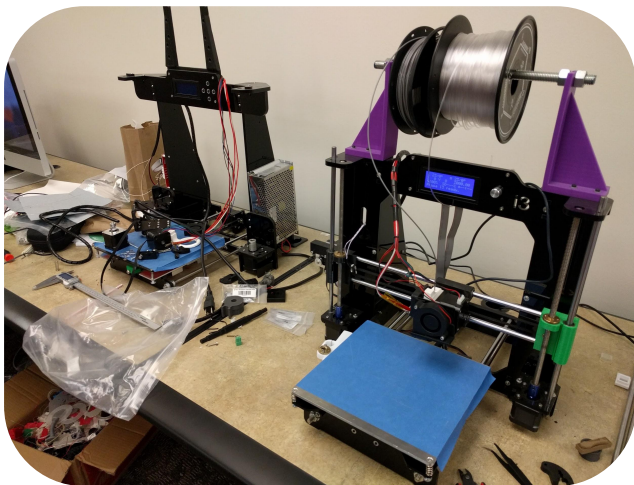
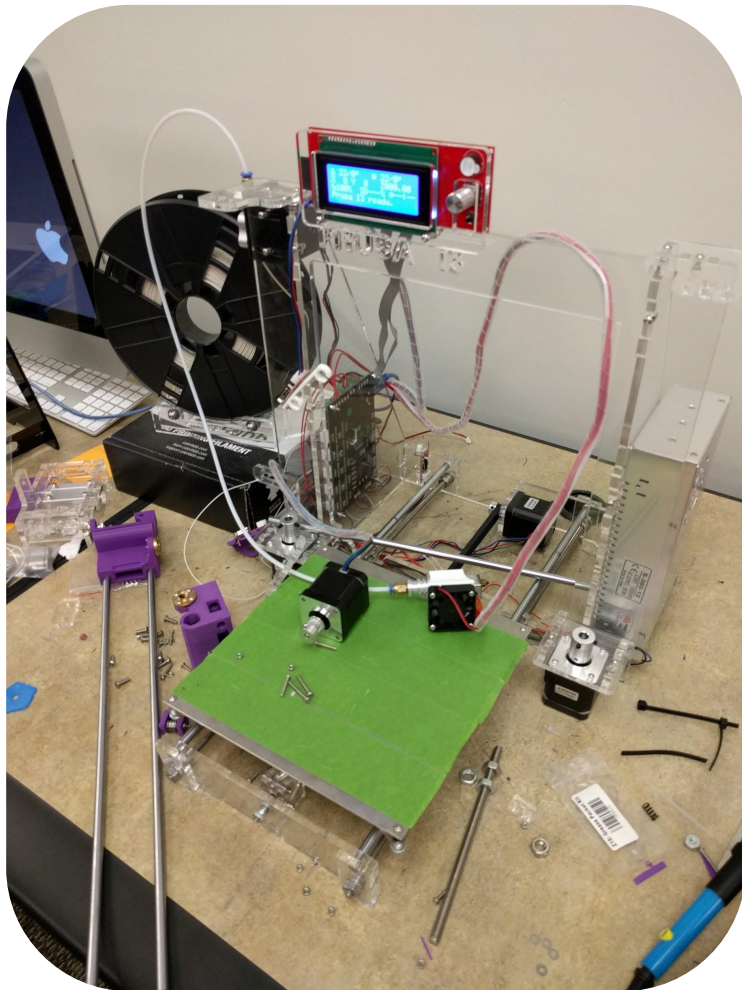
*Creativity Labs*

**Tour the  
Creativity Labs**











# Future Plans

Experimenting with  
different materials

Alternative 3D printers

Course integration







# Tour the 3D Lab

# Maker Cart

Purchased in summer 2016

Lives in Wells Library

How might we encourage creativity in the library?

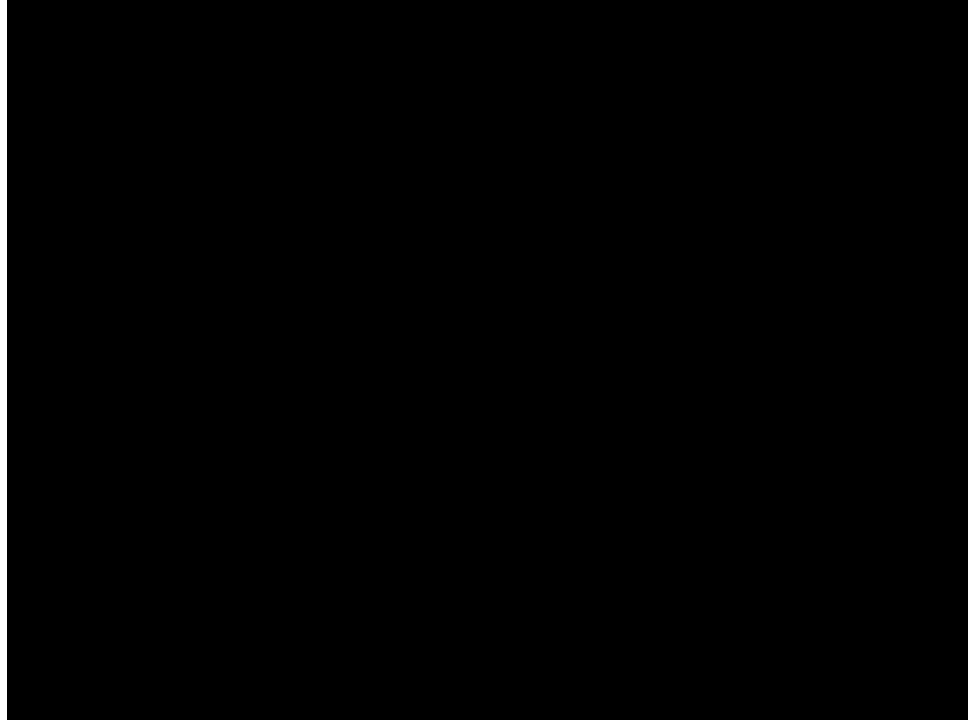
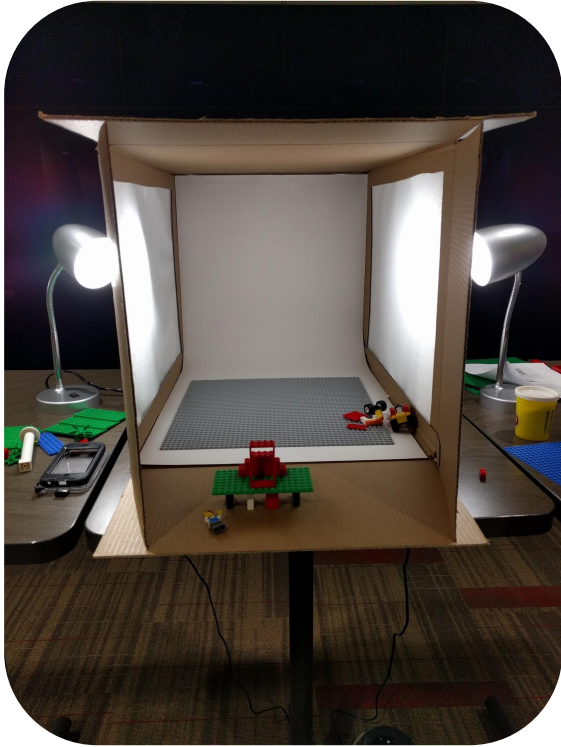






## Paper Circuits



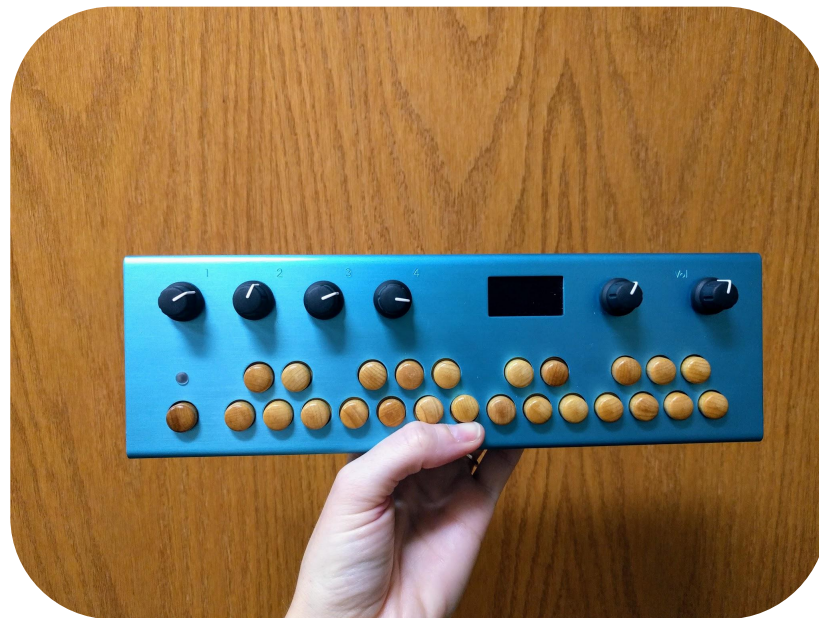


## Stop Motion Animation



**Screenprinting**





## Digital Music



**Tour the Maker Cart**

# Future Plans

More consumables

Partnerships with other library units

Dedicated library space

A campus-wide makerspace





# Resources

[MILL \(Facebook\)](#)

[Creativity Labs](#)

[UITS 3D Printing Lab](#)

[Wells Library Maker Cart](#)

[Maker Mondays Workshop Series](#)



# Thank you!

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@hey\_library

